

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
<u>L18</u>	jp-03295408-\$.did.	1	<u>L18</u>
<i>DB=JPAB,DWPI; PLUR=YES; OP=OR</i>			
<u>L17</u>	jp-03295408-\$.did.	1	<u>L17</u>
<u>L16</u>	yamatake and defect\$1 and laser\$1	1	<u>L16</u>
<u>L15</u>	yamatake and interference	38	<u>L15</u>
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
<u>L14</u>	jp-03296408-\$.did.	2	<u>L14</u>
<u>L13</u>	L11 same l9	27	<u>L13</u>
<u>L12</u>	L11 same l6	128	<u>L12</u>
<u>L11</u>	(topograph\$6 or defect\$4 or test) with (surface\$1)	157016	<u>L11</u>
<u>L10</u>	L9 same l1	89	<u>L10</u>
<u>L9</u>	((interference or moire or grating\$1 or hologra\$4)near5 (pattern\$4 or image\$2)) same (((electron\$1 or e or laser or coherent) near5 (beam\$1)) with (reflect or reflects or reflected or reflecting))	1122	<u>L9</u>
<u>L8</u>	L7 same l1	78	<u>L8</u>
<u>L7</u>	L6 same l4	1093	<u>L7</u>
<u>L6</u>	(angle)same (((electron\$1 or e or laser or coherent) near5 (beam\$1)) with (reflect or reflects or reflected or reflecting))	8830	<u>L6</u>
<u>L5</u>	L4 and l3	560	<u>L5</u>
<u>L4</u>	(interference or moire or grating\$1 or hologra\$4)same (((electron\$1 or e or laser or coherent) near5 (beam\$1)) with (reflect or reflects or reflected or reflecting))	5389	<u>L4</u>
<u>L3</u>	L1 same (((electron\$1 or e or laser or coherent) near5 (beam\$1)) with (reflect or reflects or reflected or reflecting))	3058	<u>L3</u>
<u>L2</u>	L1 same ((electron\$1 or e or laser or coherent) near5 (beam\$1))	8467	<u>L2</u>
<u>L1</u>	(reflection or reflective) near5 (mask\$1 or photomask\$1 or surface)	103337	<u>L1</u>

END OF SEARCH HISTORY

> d his

(FILE 'HOME' ENTERED AT 15:28:36 ON 23 JAN 2003)

FILE 'CAPLUS, SCISEARCH, INSPEC' ENTERED AT 15:28:50 ON 23 JAN 2003

L1 1013 S (FORWARD OR SCATTER?) (5A)HOLOGRA?
L2 139 S L1(P) (SURFACE OR TOPOGRA? OR DEFECT OR DEBRIS OR CONTAMINA?)
L3 7 S L1(P) (RELIEF)

=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	457.89	458.10
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-23.44	-23.44

STN INTERNATIONAL LOGOFF AT 15:31:59 ON 23 JAN 2003

1

> d his

(FILE 'HOME' ENTERED AT 14:41:15 ON 23 JAN 2003)

FILE 'CAPLUS, INSPEC' ENTERED AT 14:41:27 ON 23 JAN 2003
L1 3 S FORWARD SCATTER? HOLOGRA?

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

13.87

14.08

STN INTERNATIONAL LOGOFF AT 14:42:21 ON 23 JAN 2003

WEST

Generate Collection

Print

L4: Entry 50 of 52

File: DWPI

Oct 7, 1994

DERWENT-ACC-NO: 1994-361507

DERWENT-WEEK: 199445

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TITLE: Semiconductor wafer evaluation appts for estimating wafer defects and impurity
- uses diffraction X=ray detector to measure energy spectrum obtained from diffracted
and fluorescent X=ray

PATENT-ASSIGNEE:

ASSIGNEE

CODE

TOSHIBA KK

TOKE

PRIORITY-DATA: 1993JP-0067173 (March 26, 1993)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 06283585 A	October 7, 1994		005	H01L021/66

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 06283585A	March 26, 1993	1993JP-0067173	

INT-CL (IPC): H01L 21/66

ABSTRACTED-PUB-NO: JP 06283585A

BASIC-ABSTRACT:

The evaluation appts incorporates light beam emission method (2-5). This light beam is projected at an angle lesser than the critical angle for undergoing grazing reflection over a semiconductor wafer (7). A diffraction X-ray detector (11) measures the diffracted X-ray (C). The angle of incidence X-ray light on the wafer surface obtained from the wafer is so small that it undergoes Bragg reflection. A fluorescence X-ray detector (12) measures the energy spectrum of reflected fluorescent X-ray obtained from the surface of the semiconductor wafer. From the measured value, the defects and impurities on the surface of the semiconductor wafer are evaluated.

ADVANTAGE - Facilitates estimation of minute defects on crystal surfaces. Provides information about quantity of impurities in defective parts.

CHOSEN-DRAWING: Dwg.1/3

TITLE-TERMS: SEMICONDUCTOR WAFER EVALUATE APPARATUS ESTIMATE WAFER DEFECT IMPURE
DIFFRACTED X=RAY DETECT MEASURE ENERGY SPECTRUM OBTAIN DIFFRACTED FLUORESCENT X=RAY

DERWENT-CLASS: S03 U11

EPI-CODES: S03-E06C1; U11-F01B9;

SECONDARY-ACC-NO:

WEST**End of Result Set**

Generate Collection

Print

L18: Entry 1 of 1

File: JPAB

Dec 26, 1991

PUB-NO: JP403295408A

DOCUMENT-IDENTIFIER: JP 03295408 A

TITLE: METHOD AND INSTRUMENT FOR INSPECTING UNEVEN SURFACE

PUBN-DATE: December 26, 1991

INVENTOR-INFORMATION:

NAME

COUNTRY

YAMATAKE, SATOSHI

YAMAMOTO, KOJI

ASSIGNEE-INFORMATION:

NAME

COUNTRY

MATSUSHITA ELECTRIC WORKS LTD

APPL-NO: JP02098718

APPL-DATE: April 14, 1990

US-CL-CURRENT: 356/138

INT-CL (IPC): G01B 11/30; G01N 21/88; G01N 21/89

ABSTRACT:

PURPOSE: To easily identify between a defect and a nondefect from the variation of a diffracted image by setting the irradiation angle of parallel light flux so that the diffracted image has specific patterns corresponding to the defect and nondefect.

✓
CONSTITUTION: The light beam from a laser generator 1 is made into the parallel light flux which is as wide as a surface 4 to be inspected through a rod lens 2 and a cylindrical lens 3. The surface 4 to be inspected is nearly flat, but a partial nick 23 in a cross division 22. The diffracted image is in nearly parallel pattern at the nondefect like the cross division 22 and the nick 23 is irradiated with the light flux at a 1 - 10° irradiation angle θ ; so as to a diffracted image pattern which crosses said diffracted image at right angles. Then the reflected light from the surface 4 is projected on a screen and its image is picked up by an image input device 6, whose output is processed by an image processor 7 to identify the longitudinal diffracted image C at a position corresponding to the defect.

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